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states:(71) Applicant: **SONY CORP**(72) Inventor: **TERAMOTO SHIGEKI**

(74) Representative:

**(54) DELETION METHOD FOR
NONVOLATILE
SEMICONDUCTOR STORAGE
DEVICE**

(57) Abstract:

PROBLEM TO BE SOLVED: To reduce threshold distribution after deletion, without deteriorating a gate insulating film, i.e., while maintaining the data holding characteristics at a high level, in an SAH deletion technique.

SOLUTION: Source and drain impurity diffused regions are formed to be at a distance from each other on a semiconductor substrate or the like, and a gate insulating film and a floating gate are laminated on a semiconductor region interposed between both the impurity diffused regions. The withstanding voltage at least on the floating gate side end of the source impurity diffused region is small enough to cause an avalanche breakdown before tunneling occurs at the gate insulating film. This deletion method causes the threshold of a memory transistor to self-focus to a predetermined deleted state by a first-stage deletion, in which hot holes from hot carriers produced by the avalanche breakdown of the source impurity diffused region are charged into the floating gate and by a

